ATTACHMENT D

BIOLOGICAL SURVEY GUIDELINES

Guidelines should appropriately address the information desired, not detail the means to obtaining that information. They are intended to provide consistency in biological reports and offer suggested formats to contain basic information.

I. GOALS

Goals of the biological survey and report and, indirectly, these guidelines are as follows:

A. To promote an efficient presentation of information for adequate and effective environmental review in meeting the requirements of the CEQA.

B. To increase the efficiency of the environmental review process, to prevent unnecessary time delays, to standardize surveys and reports, and to define the minimum information necessary.

C. To provide the project applicant sufficient information in a timely manner to permit appropriate planning decisions prior to finalizing project designs.

D. To identify rare, endangered or sensitive species, habitats and communities.

E. To ensure that information collected in past projects can have some utility in evaluating future projects in similar circumstances.

These guidelines are meant to guide the content of biology technical reports and will be used to determine acceptability for use in EIRs and Extended Initial Studies.

II. TYPES OF SURVEYS

No two project sites are identical in terms of biological resources present, the degree of disturbance, the proximity to other developed areas, and the type of project proposed. For these reasons, the following types of biological surveys are suggested. Items discussed under each survey type should be included where practical or appropriate.

This allows the field investigator and reviewing agency sufficient flexibility while still meeting the requirements of the CEQA.

A. Basic Survey

This survey is for projects involving or permitting modifications of land in a natural or near natural state, and/or in all areas containing sensitive habitats or sensitive species (including County adopted Resource Conservation Areas).

1. Time in the field shall be proportional to the size of the project, biological heterogeneity and significance of sensitive habitats present.

2. Data collected should be quantified where possible.

3. Small mammal trapping should be conducted where the biologist deems it appropriate and may be required in situations where the presence of Stephens' kangaroo rat (Dipodomys stephensi, a rare species) is suspected.

4. It is highly recommended that field surveys be performed when the most critical resources can be best evaluated.

5. The most recent generally acceptable nomenclature shall be used to indicate plant and animal names to avoid confusion (see Attachment I or more recent literature for suggested references).

B. Specialized Surveys

These surveys would be directed towards projects involving minimal habitat alteration, or agricultural areas presently or recently under cultivation, or areas essentially devoid of native vegetation, insofar as they involve no critical habitats.

1. The emphasis of the survey shall be towards describing the project site and vicinity and any unique or sensitive biological resources and consequent impacts to these resources by the project.

2. A statement explaining the physical/biological basis for the lack of expected resources shall be included.

III. REPORT FORM AND CONTENT

The following format is suggested for the biological survey report. Each report will vary according to the type of survey performed, but all points listed should be included. For specialized surveys and surveys with negative results, the format can be presented in correspondence form.

A. Cover Page

Include a signature block of the principal investigators and the name of the project, including permit number(s).

B. Summary of Findings

Briefly state the results of the survey, sensitive species present, and the impacts anticipated with any feasible measures to reduce or eliminate likely impacts.

C. Introduction

Briefly describe the proposed project, its size and location (including a vicinity map of appropriate scale to show nearby roads or other features). Physical characteristics of the property and vicinity should also be included (i.e., topographic characteristics, water resources, soil and rock types and outcroppings, land uses on property and in vicinity; including publicly owned lands).

D. Methods and Survey Limitations

Description of methods and materials used in the survey, such as the survey techniques uses; dates, times, and conditions during the survey; limitations and rationale for the survey (e.g., that proportion of the property directly surveyed or seasonal variability); and a map, where appropriate, showing locations of transects, sample points and the areas actually visited.

E. Results

This section will include a description of botanical and zoological resources on the property; including appropriate maps showing vegetation types and locations of sensitive plant/animal resources. Lists of species present or suspected should be placed at the end of the report.

The following are suggestions for discussion of this basic information (vegetation maps, lists, etc.):

1. Mapping of Information. All maps submitted with the biology report must be of a scale sufficient to show the location of the resources identified and their relationship to aspects of the project likely to adversely affect the resources. Elevations and north direction must be indicated on all maps. In addition, at least one copy of a full scale project map (Tentative Map, Tentative Parcel Map, Special Use Permit, Variance, etc.) must be submitted, showing the resources identified and project characteristics including lot lines, roads, grading, open space easements, etc. For projects which have simple schematic project maps, the resource maps should be of sufficient size to demonstrate the resources present and indicate topographic relationships.

2. Botany. Describe the existing plant communities, as well as disturbed areas, and list the dominant (indicator) species of each vegetation, community type. Include a vegetation map (at least one copy submitted must be on a project plan map) showing relationship to the development proposal. The amount of each plant community or habitat type present on the property should be indicated in acres (or hectares); include quantitative and transect data when appropriate. Include in the report (or appendix, if appropriate) a complete listing of all plant species observed, including scientific, and where available, common names. Indicate in which community or habitat each species was found and which species are not native to the area.

3. Zoology. Provide a list of all vertebrate species observed or detected. Indicate the numbers of individuals detected or estimated. Note indications of breeding activity (i.e., nests, dens) on the property. Occurrence of the species should be related to the vegetative community of wildlife habitat types on the property when possible. Relative amounts of each wildlife habitat type should be indicated (may be same as plant communities). Both common and scientific names should be used. "Regional Lists" are not acceptable; listing of particular expected species may be appropriate but should be justified (migratory, estivating, nocturnal species, etc.).

   Discuss invertebrates in special situations (i.e., rare, threatened, or endangered butterfly species, unusual species concentrations, pest species, and marine habitats).

   If a species reported on the property is considered rare or unusual in occurrence in the region, verify its identification with a species diagnostic description.

   Indicate locations of (on at least one copy of a project map) and discuss areas exhibiting concentrations or a higher diversity of wildlife or wildlife signs, and discuss possible reasons for these activities (including amphibian breeding areas, deer feeding and raptor hunting areas, etc.). Such areas may reflect physical attributes of the property such as dunes, rock outcrops, streams, ponds, stands of trees, etc. which should be mapped.

4. Rare and/or Endangered or Sensitive Species and Habitats. The report shall contain a separate discussion of any species occurring on or using areas directly or indirectly affected by the project, which are recognized by a government agency or conservation or scientific group as being depleted, potentially depleted, declining, rare, locally endemic, endangered, or threatened, and/or any species nominated for or on a State or Federal rare, endangered, or threatened species list (see Attachment II). The choice of plant species discussed shall be

based on the California Native Plant Society list (Powell, 1974) or more recent data. For each such species indicate the number of individuals observed on or immediately off-site (the total population thought to be present), their exact status, and their exact location(s) on the vegetation map.

The survey report shall contain a discussion of those rare, endangered, and threatened plant species expected in the project vicinity, results of search for them and, if not found, the reasons why not (i.e., soil type, season). Discuss the suitability of the habitat on the property for <u>each</u> such species and the probability of the property being used by it, particularly if the survey was done when the plants would not be identifiable. Discuss here the <u>known</u> growth requirements of the species, including required soil types, exposure, elevation, availability of water, etc., as well as the time when the species is identifiable. Confirm the identification of rare, endangered, or threatened plant species, by species diagnostic photography or by a written description. For each species identified, a Plant Verification Form must be completed and included in the final technical report (Attachment III). This report can also be sent to the California Natural Diversity Data Base, CDFG Planning Branch, 1416 Ninth Street, Room 1225, Sacramento, California 95814.

If the survey was performed when rare, endangered, or threatened wildlife were not present but are known to or are likely to use the project site, discuss the probable population levels and activities of such species on the property. Verify any unusual animal identifications.

(Locality information is available on local rare plant species at the San Diego Natural History Museum Herbarium and through the California Natural Diversity Data Base.)

5. <u>Sensitive Habitats</u>. Describe and plot (on at least one copy of a project map) any habitat recognized by a government agency or conservation or scientific group as being depleted, rare and/or endangered, or otherwise sensitive (Attachment IV). For each such habitat, present data indicating its size, exact location, and the degree of its disturbance. Also, indicate the relative value of the habitat on-site and its regional significance.

Discuss any streambeds on the project site which would be modified and subject to the State Fish and Game Code, Section 1600 - 1603. Discuss the existing conditions, the project impacts, and any measures to reduce the impacts. Discuss impacts to any formally identified Critical Habitats of Endangered or Threatened Species.

F. Evaluation of Resources

(This can be incorporated into the discussion under E.4.) This discussion should include the biologic and conservation value of the important resources on the property as compared to adjacent, nearby areas in the region, or within the range of distribution of the resource. Species abundance, composition, diversity, reproduction, and other indicators or "biologic quality" on the property should be compared to similar habitats elsewhere. Evaluate the physical or biological features used by wildlife on the property and their relative importance.

All conclusions or statements should be referenced when appropriate.

G. Anticipated Project Impacts

1. Identify and direct impacts that would result from project implementation.

2. Discuss and evaluate indirect impacts anticipated on- and off-site as a result of project implementation.

3. Indicate the percentage (or acreage) of plant communities and habitats to be removed or modified by the proposed development or reasonably anticipated to be removed. Discuss likely subsequent impacts for phased and staged development, even though not a part of the project under consideration.

4. Indicate quantitatively, the anticipated loss of sensitive plant and animal populations or individuals. Also define, if possible, the local and regional significance of this loss.

5. Discuss cumulative biological impacts including known or perceived losses for the region.

6. Discuss the effects that detected pests or nuisance species may have on future project users or adjacent residents.

7. If the proposed project will disrupt the integrity or continuity of an important habitat, this should be discussed (i.e., disruption of an extensive riparian woodland).

H. Mitigation Measures

Discuss in detail any feasible mitigation measures which would reduce anticipated significant impacts to insignificant levels, and where practical, design alternatives.

Also, if it is known, indicate which mitigating measures are being proposed by the applicant and which are not. If a formal project plan has not been established, then recommendations and planning

considerations should be provided in this section. Specific design of recommended mitigations should be indicated on at least one copy of the project map. Feasibility of the mitigating actions should be discussed.

I. Certification

Provide the names and qualifications of those participating in the field work and in the report preparation. (This may be provided separately and will be kept on file at the Planning Department.)

J. Qualifications

Persons preparing or responsible for biological technical reports should have the following qualifications:

1. Sufficient formal educational background in appropriate areas of study to understand local floral and faunal relationships.

2. Sufficient local field experience in identification of flora or fauna, particularly rare, endangered, and threatened species with some knowledge of their local and rangewide population status and trends.

3. Sufficient experience in habitat evaluation and predicting and quantifying environmental impacts.

California Native Species Field Survey Form

Mail to:
Natural Diversity Data Base
California Dept. of Fish and Game
1416 Ninth Street, 12th Floor
Sacramento, CA 95814

Date of field work: ___ - ___ - ___ (mo / day / year)

For office use only

Source Code _____ Quad Code _____

Elm Code _____ Occ # _____

Copy to _____ Map Index # _____

Scientific Name *(no codes)*:

Species Found? [ ] [ ] _____
yes no If not, why?

Total # Individuals: _____ Subsequent visit? [ ]*yes* [ ]*no*

Compared to your last visit: [ ]*more* [ ]same [ ]fewer

Is this an existing NDDB occurrence? [_____] [ ] [ ]
Yes, Occ. # *no* *unk.*

Collection? If yes: _____ _____
number *Museum/Herbarium*

Reporter: _____

Address: _____

Phone: ( ) _____

Other knowledgeable individuals (name/address/phone):

Plant Information:

Phenology: _____ _____ _____
% vegetative *% flowering* *% fruiting*

Animal Information:

Age Structure: _____ _____ _____
 # adults *# juveniles* *# unknown*

Site Function: [ ] [ ] [ ] [ ] [ ] [ ]
breeding foraging wintering roosting burrow site other

Location: *(Please also attach or draw map on back.)*

County: _____ Landowner/Mgr: _____

Quad Name: _____ Elevation: _____ UTM: _____

T_____R_____ _____ 1/4 of _____1/4 Sec _____ T_____R_____ _____ 1/4 of _____1/4 Sec _____

Habitat Description: *(Plant communities, dominants, associates, substrate/soils, aspect/slope)*

Other rare spp.?

Site Information: Current/surrounding land use:

Visible disturbances, possible threats:

Overall site quality: [ ]*Excellent* [ ]*Good* [ ]*Fair* [ ]*Poor* Comments:

Determination: *(Check one or more, fill in the blanks)*

___ Keyed in a site reference: _____

___ Compared with specimen housed at: _____

Photographs: *(Check one or more)* *Slide* *Print*

Plant/animal ___ ___

Habitat ___ ___